

BRUHAT BANGALORE MAHANAGARA PALIKE, YELAHANKA ZONE

Executive Engineer
Byatarayanapura Division
B.B.M.P., Bangalore - 92

DRAFT TENDER SCHEDULE

Issued to :

Original / Duplicate
Item No.

Improvements to roads, drains and Drilling borewells in ward no. 05 & 06 of Byatarayanapura sub division of Byatarayanapura Division as per Annexure to Go No:UDD/449/SFC/2015
Dated:24-11-2015

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
1	6257.10	Removing BS Slab of drain and Stacking	Sqm	63.72	
2	5198.58	Refixing Stone Slabs of drains and Pointing in C.M(1:3)	Sqm	78.84	
3	4385.05	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete.10cm thick	Sqm	794.88	
4	1278.00	KSRB 5-9 : Providing chamfering edges to stone slab 2.5 cms. wide as per specifications. (only chamfered length shall be recorded) KBS 5.1.13(Page No 24., I.No.5.22 of KPWD S.R 2015-16).	m	35.64	
5	1278.00	KSRB 5-9 : Providing Machine cutting to granite stone slabs edge all four sides to get plain even surface, the work includes the cost of cutting blades, hire charges of cutting machine, Generator and including cost of all labour, materials (Excluding cost of BS slabs) HOM of machineries, with all lead and lift charges, loading and unloading charges etc., complete as per the direction of the Engineer-in-charge of the work	m	60.00	
6	5655.11	KSRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3	Cum.	171.80	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
7	98.26	Earthwork excavation for foundation of buildings, water supply, sanitary lines & electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after breaking of clods complete as per specifications. (Page No 5., I.No.2.3 of KPWD S.R 2015-16).	Cum.	192.24	
8	134.41	KSRRB M200-13.1. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications II. By Mechanical Means. A. Cement Concrete Grade M-15 &M-20.(Page No 136, I.No.18.20 of KPWD S.R 2015-16).	Cum.	453.92	
9	14.22	KSRRB M200-15.2. Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts complete as per specifications. iii)Dismantling Stone Masonry. B. Rubble Stone masonry in cement mortar.MORTH Specification No. 202 (Page No 137., I.No.18.27 of KPWD S.R 2015-16).	Cum.	339.44	
10	167.71	KSRB 5.2-3. Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13	Cum.	4135.32	
11	52.38	1 KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.	Sqm	99.36	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
12	67.60	KSRB 5-14 : Providing and constructing precast concrete solid blocks with compressive strength not less than 35 Kg/sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x15x20cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications.	Sqm	963.36	
13	36.80	KSRB 5-14 : Providing and constructing precast concrete solid blocks with compressive strength not less than 35 Kg/sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x10x20cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications.	Sqm	743.04	
14	90.94	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2	Cum	5236.92	
15	18.52	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregates @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2	Cum	5490.72	
16	4.74	KSRB 4-1.5 : Providing and laying in position plain cement concrete of mix M20 with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.64cum and fine aggregates @ 0.43cum, with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2	Cum.	5991.84	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
17	23.92	Providing and laying cement concrete using 20mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete for RCC works laid in 15 cm thick layers and well compacted including vibrating curing etc., including smooth finish in CM 1:3, with all lead and lift etc., complete. (exclusive of cost of steel and fabrication charges) Ready mixed Cement concrete for Beams, Columns, Staircase and Roof with M-20	Cum.	6332.04	
18	47.40	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness , ncluding attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2	Sqm	306.72	
19	395.33	Providing and laying Plain /reinforced cement concrete M20 for Box drain walls of thickness 10cm to 20cm including centring shuttering for work etc. complete as per approved drawing and design MORTH specification No.1500,1700,2200	Cum.	6931.44	
20	25.07	KSRB 4.9.2 : Providing T .M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 for TMT Bars Fe500	Tonne	69805.80	
21	453.87	Providing precast slab of 100 mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- Data rate	Sqm	1834.00	
22	297.72	Providing precast slab of 250mm thick including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- Data rate	Sqm	5111.00	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
23	467.25	KSRB 14.6-1: Providing and laying heavy duty cobble stones 60mm thick interlock pavers, using cement and course sand for manufacture of blocks of approved size, shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (average thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS (Page No 101., I.No.14.6 of KPWD S.R 2015-16).	Sqm	934.20	
24	566.00	Removing and resetting of kerb stones	m	63.72	
25	1815.00	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork, curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc., complete..	Nos.	320.76	
26	285.25	Supplying and fixing M.S. Rectangular poles made out of 2 equal angles of 65x65x6 mm welded together and fixed in CC (1:2:4) WITH 2 NOS 16mm dia M.S. hold fast rods each of length 25 cms. Including cost of all materials cutting, bending scaffolding wherever necessary, nicely finishing the welded joints with all lead lifts and as per the directions of the Engineer- in - charge of the work and including providing 2 coats of approved quality paint over one coat of shop painting (excluding cost of earthwork and concrete)	m	991.44	
27	656.00	Providing chain link fencing 50mm size of 8 guage properly stretched between rectangular poles and fixed with suitable bolts & nuts, the free ends shall be welded to the pole and block pipe at top and bottom as required including cost of all materials, labour, lead and lifts and as per the directions of the Engineer-in-charge of work including two coats of approved quality paint over one coat of shop paint	Sqm	697.68	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
28	642.00	Providing and fixing M.S. Block pipe of 38mm dia , of heavy guage of 14 including removing the bends, cutting the pipe, and fixing pipe in between the two verticle poles (M.S. rectangular poles) and spot welding the chain link with M.S. block pipe including cost of all materials wastage in cutting, and scaffolding wherever necessary with all lead and lift as directed by the Engineer-in-charge of work etc., complete including two coats of approved quality paint over one coat of shop paint.	m	338.04	
29	12.30	Providing & fixing MS Gate as per Chief Architect Drawing, using 50mm * 50mm 14 gauge MS hollow pipe frame work bent to ornamental shape as shown in the drawing & 35mm * 6mm & 16 * 16mm square rods for verticals alternatively spaced at 4cms c/c in two halves & 40mm * 6mm MS flats for horizontal member & at the top cast iron spikes are provided at alternate vertical members as shown in the drawing etc., complete. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting & grinding equipment, & electricity charges, with all lead & lift, loading & unloading charges etc., complete as per specifications(Page No 42., I.No.7.37 of KPWD S.R 2015-16).	Sqm	3299.40	
30	21.60	KSRB 2.6 : Providing and filling dust in foundation upto plinth to required depth for sub soil treatment including watering ramming with all lead and lift complete as per specifications. specification. No. KBS 2.10.2, (Rate Analysis)	Cum.	1156.76	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
31	12.00	Geophysical investigation of site for sinking borewell for supplying drinking water to the habitation either through the hand pump, MWS or PWSS by vertical electrical sounding by adopting venner or schlumbergers method. Including reconnaissance survey of geological formation. Geophysical investigation of existing ground water in the vicinity, its quality, quantity and acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 metre in consolidated formation for proper seating of casing pipe, depth of drilling required to cover depth of aquifer proposed to be trapped probable yield and other information required including transportation of instrument and accessories to work site, engaging technical personal and labour required etc.,	Nos.	1900.00	
32	600.00	Sinking borewell of 165 mm dia clear, using super fast hydraulic rig of capacity 250 PSIG & above 900 CMF & above in all strata including overburden upto 20 M, fixing of casing pipes, collars and cap with necessary cutting and threading including transportation of rig and supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimum working of compressor for one hour (Excluding casing pipes collars and cap etc.,) (PRED SR 2010-11 P36/ I /NO 9.1.1 TO 9.1.6) 0.00 to 50.00 mtrs	m	287.00	
33	600.00	50.00 to 100.00 mtrs	m	379.00	
34	600.00	100.00 to 150.00 mtrs	m	422.00	
35	600.00	150.00 to 200.00 mtrs	m	464.00	
36	240.00	Supply of ISI mark 175mm nominal bore medium block ERW casing pipe of 5mm thick block in electric resistance continuous welding mild steel tube material confirming to IS 1387/1993 & manufactured from hot rolled steel skelp/strips in random length of 4 to 7 mtrs. Both ends thread confirming to IS 554/1985, one end fixed with a socket and the other end with a plastic protection end (Inclusive of all Taxes)	m	1525.00	
37	48.00	Providing 175mm dia MS Casing collar	Nos.	150.00	
38	12.00	Providing 175mm dia MS Casing cap	Nos.	100.00	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
39	120.00	Providing 250mm dia 6 Kgs / Cm2 PVC Pipe	m	1525.00	
40	12.00	Supply and deliver at site brand new Texmo/Atlanta/Luby/ Calama make suitable for vertical installation in 150mm dia bore wells comprising of single stage or multistage CF pump closed by means of stainless steel coupling to suitable HP, suitable speed totally enclosed and fitted with pure drinking water (Wet type) squirrel cage submersible induction motor suitable for operation of 3PH 50 HZ 380/440 Volts AC supply fitted with required accessories, sand guard non return valve, etc. complete the pump and motor shell form an integral unit with all the required fitting 12.5HP 20 Stage (including VAT) with all lead and lift and as per directions of the engineer incharge of work 15HP / 30 STAGE	Set	54000.00	
41	6960.00	Supplying and delivery of brand new Finolex make PVC coupler conductor to latest indian standard specification with 1x3x4 Sqmm Submersible flat cable.(RDED approved rate.) With all lead and lift and as per directions of the engineer incharge of work.	m	185.00	
42	12.00	Supplying and delivery at site brand new star/Essen/Lotus/Sun-shines/Adarsh/ G.K.Controls Best Indigenous make combined energy meter-cum-control panel board unit minimum mechanically strong suitable for operation on 3HP 50HZ 380/440 volts AC supply with spring loaded Latch locking Device with a key Ribbs should be provided. control panel board unit suitable for operation on 3HP 50HZ 380/440 Volts AC shall be consists Etc. complete the panel board shall be fabricated in single unit in the above components panel board suitable pump set 5HP to 12.5HP with star Delta Starter (RDED approved rates). With all lead and lift and as per directions of engineer incharge of work	Set	10000.00	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
43	3360.00	Supplying and fixing ISI marked Galvanized mild steel tube electrical resistance welded (ERW) Hi freezency inclusion whelded hot finished we with latest amendments, pipes threaded at both end the other end procte with HD colled as per specification in random lengths 4 to 7 mtrs confirming to IS 1239/ part 1990 with amendment 1-5 and with all its latest amendments if any: the pipe supplied should be with BIS Mark Galvaized iron pipes : ISI 239 (part 1) 1990 50mm dia "C" Class (Heavy Duty coller) Weight in KG/Mtr-6.26 (PRED Bangalore Circle SE Approved rate dated:26.07.2010)	m	530.00	
44	12.00	Providing and fixing position 50mm non return valve of verticle type of approved make including cost of all materials labour HOM of Equipments with all leads complete as per Specification with all lead and lift and as per direction of engineer incharge of work.	Nos.	1083.00	
45	12.00	Supplying and fixing 50mm dia GI Union with ISI mark.	Nos.	252.00	
46	36.00	Supplying and fixing 50mm dia GI Bend with ISI mark.	Nos.	124.00	
47	12.00	Errection of pumpsets including aligning and balancing with all necessary errection of materials and labour including aupplying and errection of two pair of supporting clamps borewell cap, cable clip and water light and as per direction of engineer incharge of work.	Set	1761.00	
48	12.00	Errection of comined panel board and and laying in position plain cement concrete of mix 1:2:4 with stone aggregate 20mm and down graded metal machine mixed concrete laid in layersnot exceeding 15cms thick well compected, cost of all materials labour, HOM of machineries, curing complete as per specification no KRBS 4.1.4.2 (B.C.S.R OF 2010-11 S.R.P no. 12/item no4.3) asper direction of engineer incharge	Cum.	438.00	
49	12.00	Supplyng of TPST with rewirable porcelain channels in SM incloser 15/32 amps and the work has to be carried out according to the directions of the engineer incharge of work.	Nos.	1494.00	
50	12.00	Supplyinf and fixing 500x500x65mm polished wood board made of not less than 25mm thik planks on both sides with planka made out of not more than 2 pieces and fixing the same to the wall using tapered inverting wooden plugs, screws etc. With all lead and lift and as per directions of engineer incharge of work	Nos.	294.00	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
51	12.00	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 220v A.C.50 Hz 12/24v.D.C.S	Nos.	443.00	
52	12.00	Supplying shunt capacitors confirming to IS 2834.3phase 400/440 volts grade for power factor improvement of routing machinery capacitor in KVAR rating Nos. 2KVAR capacity. as per directions of engineer incharge of work.	Nos.	371.00	
53	12.00	Supplying and fixing nature circuit breakers on existing MCB, distribution boards using necessary fixing materials and wiring complete as per required 5 to 32amps TPN. As directions of engineer incharge of work.	Nos.	1035.00	
54	12.00	Supplying and fixing wiring earth electrode for grounding conduits IC cutouts and other equipments on the meter board using 40mm dia 2.9mm thick GI pipe 2.5m long buried in a pit. The pit followed filled with equal portions of salt and charcole. 150mm all round the pipe to complete depth the connection from pipe to the conduit etc. is to be established through GI wire of size as per ISI specification 7.3.3 of IS 732 using 12mm dia bolts, nuts, washers, check nuts, etc., the pipes shall have 16 through holes of 12mm dia	Nos.	2009.00	
55	24.00	Supplying and fixing of A class (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class 40mm dia and the work has to be carried out according to the directions of the Engineer incharge of work.	m	248.00	
56	360.00	Supplying of LT UG cable having aluminium conductor PVC insulated sheathed, galvanised, steel wire/steel tape armoured cable with PVC outer sheathing 1.1KV class (Confirming to IS 1554) 4 core 16 sqmm Class B PVC cable as per direction of the Engineer incharge of work.	m	155.00	
57	360.00	Labour charges for laying of 1.1 KV class UG cable when supplied departmentally/ agency/ existing trench GI pipe/ stone pipe / on wall/ on pole as required 6 sqmm to 16 sqmm. As per directions of the engineer incharge of work.	m	8.00	
58	180.00	Digging of trench of 0.6 m deep x0.50 mtrs wide refilling the trench to the required ground level and consolidating etc complete cutting road surface as per directions of the engineer incharge of work	m	50.00	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
59	12.00	Supplying and fixing LT cast iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps,. Bolts, nuts & washers etc 4 core 16 sqmm	Nos.	268.00	
60	36.00	Supplying of porcelain fuse channel with cutout 32ampers and the work has to be carried out according to the directions of the engineer incharge of work	Nos.	100.00	
61	441600.00	Fabricating supplying and mounting Msbox made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary scable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete box of 21600 sqcm 16SWG P No. 41 I.No 38B KPWD Electrical SR 2010-11	cm	0.33	
62	1587.60	KSRB 2-2.2: Earthwork excavation for foundation of buildings, water supply,sanitary lines and electrical conduits either in pits or in trenches, 1.5m and above in width, in hard soil not exceeding 1.5m in depth including dressing the bottom of pits and trenches,stacking the excavated soil clear from edges of excavation with lead upto 50m,after breaking of clods complete as per specification,specification No.KBS 2.1(b).2.3.5(P.5/2.4) SR 2015-16	Cum.	288.36	
63	2220.00	Providing and installing at site of work PVC including cost of pipes and specials and labour including lowering into trenches laying true to line level and perfect linking at joints leak proof including jointing of approved, type with all labour and lift charges, handling charges with in initial lead of 5kms including encasing the pipe all round to a depth not less than 25cms with gravel or selected earth available from the excavation etc., complete 6 KSC 63mm Dia PVC pipe PRED 3/4.2(A) 63MM DIA	m	304.00	
64	720.00	75mm dia	m	400.00	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
65	1587.60	KSRB 2-4: Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5m including cost of all labour complete as per specifications allow 60% of rate considered under item KSRB 2.3(P.6/2.11) Qty vide item no:26	Cum.	76.32	
66	72.00	Providing and fixing 50mm dia Gun Metal Wheel valve conforming to IS, Specification of approved make as per directions including all lead and lift etc., complete 50mm PRED	Cum.	1605.00	
67	12458.37	KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301	Cum.	137.24	
68	13531.26	KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occurring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 (Page No 148., I.No.19.64 of KPWD S.R 2015-16).	Sqm	4.86	
69	3885.72	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, mixing in a mechanical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method. Close graded granular sub-base material as per 400-1 For Grading- II Material	Cum.	1622.16	
70	4397.36	KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406	Cum.	1713.96	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
71	20095.70	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 (Page No 160., I.No.21.6 of KPWD S.R 2015-16).	Sqm	32.40	
72	13474.00	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter	Sqm	3.24	
73	36645.70	KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5	Sqm	15.12	
74	1148.42	KSRRB M500- 15. Providing, laying dense graded bituminous macadam using 40/60 THP capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507	Cum.	7927.20	
75	1231.67	KSRRB M500- 15. Providing, laying bituminousConcrete using 40/60 THP capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509	Cum.	9822.60	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
76	548.56	KSRRB M600-1. Construction of dry lean cement concrete mix M5 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383,) aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. MORTH Specification No. 601	Cum.	3900.96	
77	977.12	Cement concrete pavement. Construction of unreinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M30(at 360 kg per cum coarse aggregate @ 0.69 cum and fine aggregate @0.46 cum) , with 25mm and down size graded granite metal coarse aggregates and fine aggregates , with superplasticiser @3lts confirming to IS9103-1999 reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rakers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications.	Cum.	5957.28	

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
78	3022.30	Providing groove cutting for Concrete pavement width of 5mm to 10mm and depth 80mm- 100mm including cost of cutting machine, generator & HOM of machinery, including cost of blade,coolant etc., including cleaning of groove & providing sand and hot bitumen fillars, and filler metal etc., including cost of conveyance of all materials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications.	m	124.20	
79	206.85	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8	Sqm	61.56	
80	1318.13	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803	Sqm	473.04	


 Executive Engineer,
 Byatarayanapura Division
 BBMP, Bangalore - 92

Note:

- 1 Item for which no rate or price has been entered in will not be paid for by the Employer when executed and shall be deemed covered by the other rates and prices in the Bill of quantities (refer: ITB Clause 7.2 and CC Clause 33.2)
- 2 Unit rates and prices shall be quoted by the Tender in Indian rupees.
- 3 Where there is a discrepancy between the rate in figures and words the rates in words will govern (ITB Clause 19.1(a))
- 4 Where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by quantity the unit rate quoted shall govern (ITB Clause 19.1(b))

ಕರಡು ಬೆಂಡರ್ ಪಡೆದಿರಾನ್ತು,
 ಶಿದ್ಧಪಡಿಸಿದ ಸಂಖ್ಯೆ...೪೨೧
 ಶಿದ್ಧಪಡಿಸಿ ಮಾಡಿ/ಇಲ್ಲದೆ
 ಅನುಮೋದನೆ ನೀಡಿರಾಗಿದೆ

"Approved"
